

SG6650 Series

Cylinder Connections

Cylinder connections are used for connecting various items of gas handling apparatus (such as pressure regulators or pigtails) directly to a high pressure gas cylinder. The actual connection varies depending on the gas in the cylinder and is designated by a three digit code (CGA Connection Number) as set forth in Compressed Gas Association publication V-1. Cylinder connections consist of a CGA nut and CGA nipple and in some cases require a washer for sealing purposes. Refer to pages 187-189 for CGA connection details.

Advanced offers cylinder connections in a variety of configurations and materials. One configuration, available in either brass or Type 316 Stainless Steel, features a check valve housed within the CGA nipple. This configuration restricts flow to only one direction, and prevents "backflow" from the process to the cylinder.

Also offered are special Type 316L Stainless Steel cylinder connections which end in a male vacuum-type face seal fitting for use in systems utilizing VCR® or VCR® compatible type fittings.



CGA Nut and Nipple Connections

Specifications

Pressure Range:

CGA 290, 510, 678 and 679: 0-500 psig
 CGA 347, 680 and 695: 3001-5500 psig
 CGA 701: 4001-5500 psig
 CGA 677, 702 and 703: 5501-7500 psig
 All Others: 0-3000 psig

Temperature Range:

SG6650-CGACV: -70°F to 150°F
 SG6651-CGACV: -40°F to 150°F

Materials of Construction

Part No.	CGA Nipple	CGA Nut	Check Valve Seat
SG6650-(CGA)	Brass	Brass	NA
SG6650-(CGA)CV	Brass	Brass	EPDM
SG6651-(CGA)	Type 316 Stn. Stl.	Type 303 Stn. Stl.	NA
SG6651-(CGA)CV	Type 316 Stn. Stl.	Type 303 Stn. Stl.	Viton®
SG6651-(CGA)VM	Type 316L Stn. Stl.	Type 303 Stn. Stl.	NA
SG6652-(CGA)	Monel	Monel	NA

"(CGA)" shown above indicates that the various CGA connections, listed in Tables I and II, are used to make up complete part numbers.

Table I, Cylinder Connections (Brass and Monel)

CGA No.	Brass		Brass with Check Valve		Monel		Teflon* Washers (Pkg. of 25) Part No.
	Part No.	Outlet Connection	Part No.	Outlet Connection	Part No.	Outlet Connection	
170	SG6650-170*	1/8" NPT male	—	—	—	—	SG3542
180	SG6650-180	1/8" NPT male	—	—	—	—	SG3541
280	SG6650-280**	1/4" NPT male	—	—	—	—	—
296	SG6650-296	1/4" NPT male	SG6650-296CV	1/4" NPT male	—	—	—
320	SG6650-320	1/4" NPT male	SG6650-320CV	1/4" NPT male	SG6652-320	1/4" NPT male	SG6076
326	SG6650-326	1/4" NPT male	SG6650-326CV	1/4" NPT male	—	—	—
330	—	—	—	—	SG6652-330	1/4" NPT male	SG6076
346	SG6650-346	1/4" NPT male	SG6650-346CV	1/4" NPT male	—	—	—
350	SG6650-350	1/4" NPT male	SG6650-350CV	1/4" NPT male	—	—	—
500	SG6650-500**	1/4" NPT male	—	—	—	—	—
510	SG6650-510	1/4" NPT male	SG6650-510CV	1/4" NPT male	—	—	—
540	SG6650-540	1/4" NPT male	SG6650-540CV	1/4" NPT male	—	—	—
580	SG6650-580	1/4" NPT male	SG6650-580CV	1/4" NPT male	—	—	—
590	SG6650-590	1/4" NPT male	SG6650-590CV	1/4" NPT male	—	—	—
660	SG6650-660	1/4" NPT male	—	—	SG6652-660	1/4" NPT male	SG6075
670	—	—	—	—	SG6652-670	1/4" NPT male	SG6075
701	SG6650-701	1/4" NPT male	—	—	—	—	—

* Washers constructed of lead and PCTFE are available for certain CGA connections. Contact your Advanced Representative for additional information.

** Connection is chrome-plated brass.